

DETAILED ACTION

The response received 3/09/2010 has been placed in the file and was considered by the examiner. This application contains claims numbered 1-15. Claims 14-15 have been added. Claims 7-8 and 12-13 have been withdrawn.

Amendment to specification filed 10/14/2009 has been entered.

Claim Objections

Claim 1 is objected to because of the following informalities:
viscosity V1 and viscosity V2 should be changed to – first viscosity -- and
--second viscosity – , respectively.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5-6 and 9-11 and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 2003/0041956 to Pigott et al.

As to claims 1 and 15, Pigott et al. discloses methods and techniques for creating anti-slip surfaces on the surfaces of plastic products such as plastic pallets 10, 11

containers or trays, bins, totes, shelves, decks, drums etc. used for material handling and for industries, household, sport and creations etc. The techniques and methods basically comprises a second plastic applied a surfaces of the base plastic 10, 11 to create friction. The second plastic is basically applied to the plastic base by welding to or bonding to to create anti-slip surfaces which has a higher coefficient of friction, lower viscosity than the natural surface of the plastic base (which has lower coefficient of friction, higher viscosity than the second plastic/thermoplastic) (rigid component). Additional higher friction can be applied to all areas of contact surfaces of the plastic base which include upper surface 20, bottom surface 21 and possibly the inner surfaces 22 of the pallet plastic base. The all areas as discussed in Pigot et al. typically cover the rigid zone and can be said as the anti-skid outer contact zone envelops or surrounds the rigid zone. Thus, Pigott et al. discloses all the structural limitations as recited in the at least claims 1 and 15 which include a plastic base comprising at least one *contact portion* which is constituted by an anti-skid outer contact zone (a second plastic) and a rigid zone (a first plastic base). The contact portion is produced from a single composite plastics material which is a mixture of at least one anti-skid component having a first viscosity at an injection temperature and a rigid component which forms the rigid zone and which has a second viscosity at the injection temperature, the first viscosity is lower than the second viscosity so that the anti-skid outer contact zone comprises a higher concentration of anti-skid component than the rigid zone.

Note that Pigott et al. does not disclose expressly about viscosity at the injection temperature as claimed. However, viscosity is defined as an internal friction of a fluid

produced by movement of its molecules against other. Viscosity causes the fluid to resist flowing. Viscosity combination with temperature is the conditions of the processes and the conditions of being viscous. These conditions are considered as methods of forming rather than structural in article claims. The method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Note that with respect to claim 15, Pigott et al. does not disclose expressly that the anti-skid outer contact zone envelop the rigid zone. However, Pigott et al. discloses that additional higher friction can be applied to areas where friction is desired to reduce slippage between the pallet and the tines while pallet is being transported. The areas as pointed out to where additional friction is need of contact surfaces of the plastic base which include upper surface 20, bottom surface 21 and possibly the inner surfaces 22 of the pallet plastic base. The all areas as discussed in Pigott et al. typically cover the rigid zone and can be said as the anti-skid outer contact zone envelops or surrounds the rigid zone. Nonetheless, to have the anti-skid outer contact zone envelops the entire rigid zone would have been obvious in view of the teaching of Pigott et al. One of ordinary of skill in the art would have been motivated to provide the entire contact surfaces of the base with anti-slip outer zone in order to reduce slipping off from all angles of the pallet base that may contact when being transported.

As to claim 2, wherein the anti-skid component is a thermoplastic elastomer (see [009], or [0031-0032] etc.

As to claim 3, wherein the rigid component is of polyethylene (see [0011], [0014] which is polyethylene or polypropylene, which, compatible with the anti-skid component.

As to claims 5 and 10, wherein the contact portion is an upper plate 20, of the pallet 10.

As to claims 6 and 11, wherein the contact portion is a base plate 21 of the pallet 10.

As to claim 9, wherein the rigid component is polyethylene.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pigott et al in view of US Patent No. 6,892,993 to Palmer.

Palmer teaches the plastic/thermoplastic base 20 from which may be fabricated, may optionally be reinforced with a material selected from glass fibers, carbon fibers metal flakes, polyamide fibers, and mixtures thereof. The reinforcing fibers and the glass fibers in particular, may have sizing on their surfaces to improve miscibility and/or adhesion to the plastics into which they are incorporated, as is known to the skilled artisan (col. 5, lines 42-52) for example.

Thus to provide an additional reinforcement component such as fibers into Pigott would have been obvious for one skilled in the art at the time the invention was made in

vie w of the disclosure of Palmer. One of ordinary skill in the art would have been motivated to do this in order to make the pallet durable and stronger.

Response to Arguments

Applicant's arguments filed 10/14/2009 and 3/09/2010 have been fully considered but they are not persuasive.

Applicant argues that the base plastic and second plastic of Pigott is not a mixture. Rather the second plastic is bonded to, applied to or welded to the base plastic and the entry of Pigott does not disclose that the base plastic and second plastic is a mixture.

Examiner respectfully disagrees. Pigott clearly discloses the handling device comprising at least one contact portion which comprises an anti-skid outer contact zone and a rigid zone. One can arguably say that the contact portion is being formed from a single composite plastic material which comprises a structure which made up of two distinct elements, components or zones. Other words, a structure as disclosed by Pigott is mixed by two combinations of different elements, components or zones: an anti-skid component/zone and a rigid component/zone where as the outer zone envelops the rigid zone. So broadly put, the base plastic and a second plastic of Pigott is a mixture, a combination of two different elements, components or zones which defines a contact portion.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAN LE whose telephone number is (571)272-6818. The examiner can normally be reached on Mon. through Fri. from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen J. Shriver can be reached on (571) 272-6698. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amy J. Sterling/
Primary Examiner, Art Unit 3632
6/7/10

/T. L./
Acting Examiner of Art Unit 3632